

What we claim as our invention is:

1. A method for updating configuration parameters in customer premises telecommunications hub comprising:
  - receiving in a customer premises telecommunications hub a new configuration file sent from a remote location;
  - identifying parameters in the new configuration file which are different than existing parameters stored in said customer premises telecommunications hub;
  - checking the parameters which are different to determine whether they can be changed dynamically, and
  - if all parameters which are different can be dynamically changed, updating all parameters to those contained in the new configuration file.
2. A method according to Claim 1, further comprising:
  - if any of the parameters which are different cannot be dynamically changed, rebooting the system.
3. A method according to Claim 1, wherein:
  - said hub comprises a configuration update module and a plurality of other functional modules which use parameters contained in the configuration file,
  - said other functional modules register check and update function calls with said update module,
  - said update module writes the new configuration file into flash memory and issues a check function call to each of the other functional modules, and

each functional module compares configuration file parameters in the new configuration file to its existing parameters, and notifies the update module whether the parameters which are different can be changed dynamically.

4. A method according to Claim 3, wherein:

if the parameters which are different can be changed dynamically, said update module issues an update function call to each of the other functional modules.

5. A method according to Claim 3, wherein:

if the parameters which are different cannot all be changed dynamically, said update module reboots the system.

6. A method according to Claim 1, wherein:

said step of updating parameters is performed when said customer premises telecommunications hub is in an idle state.

7. A method according to Claim 1, wherein:

said new configuration file is received over a wide area network connection in Internet protocol.

8. A method according to Claim 1, wherein:

said new configuration file is received over a DSL connection to a server in a central office.

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10. A customer premises telecommunications hub, comprising:

- a wide area network connection for receiving Internet protocol messages,
- a memory storing a configuration file,
- a microprocessor having a plurality of functional program modules operating with parameters contained in the configuration file, each functional module storing configuration file parameters which affect its operations and having a check function and an update function, and
- a configuration update module adapted to receive a new configuration file over the wide area network connection while the microprocessor is in a running state, to store the new configuration file in memory, and to call the check function and the update function in each functional module.

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11. A system for dynamically updating configuration file parameters in a customer premises telecommunications hub comprising:

- a remotely located configuration server accessible over a wide area network connection,
- means for receiving a new configuration file from said configuration file server over a wide area network connection while the customer premises telecommunications hub is in running state,
- means for comparing parameters controlling operation of the customer premises telecommunications hub to parameters contained in the new configuration file and identifying parameters which are different,
- means for identifying parameters which can be changed dynamically,

